

Big West Oil Refinery Update

State Superfund November 2015

Background

The Big West Oil Refinery (BWOR) Comprehensive Environmental Cleanup and Responsibility Act (CECRA) Facility is an approximately 80-acre area located at the intersection of Highway 215 and Front Street in Kevin. BWOR was a petroleum refinery that operated from approximately 1925 to 1977. The refinery received crude oil from many sources and produced propane, butane, regular and premium gasolines, stove oil, diesel fuel, asphalt cements, and cut back asphalt. Some of these products were released from refinery infrastructure and operations into the environment, contaminating soil and groundwater with petroleum hydrocarbons and metals. UTC Canada Corporation (UTCC) is the liable party who will conduct the cleanup of the BWOR Facility. UTCC has completed a remedial investigation, risk assessment, feasibility study, and a significant number of interim remedial (cleanup) actions under an Administrative Order issued by DEQ. The interim remedial actions included refinery infrastructure removal, gasoline recovery from underground, asphalt recovery, and stabilization/solidification of a sludge pond and wastewater pond. The purpose of these activities was to determine the type and amount of contamination, reduce the risk of human and ecological exposure to contamination, and clean up portions of the Facility to protect human health and the environment.

What's Coming Up at BWOR?

DEQ has completed a Proposed Plan, which is an in-depth look at cleanup options for the Facility. The Proposed Plan identifies and explains the preferred cleanup options and summarizes other cleanup options evaluated by DEQ. DEQ will select the final remedy for the BWOR Facility and present it in a Record of Decision (ROD) after considering all information and comments submitted on the Proposed Plan during the 30-day public comment period. A responsiveness summary, which is a written response to each public comment, will be included in the ROD. The preferred remedy may be revised in response to public comment or new information.

Evaluating Cleanup Options

Following the Feasibility Study process, DEQ evaluated several cleanup options to address soil and groundwater contamination and asphaltic materials at the BWOR Facility. When evaluating cleanup options, DEQ must consider the present and reasonably anticipated future usage of the Facility properties. There were common elements to each option considered, such as long-term monitoring and institutional controls. Long-term monitoring helps in evaluating the effectiveness of the cleanup and ensures that groundwater meets water quality standards. Institutional controls are restrictions on the use of property that lessen the risks posed to human health. Institutional controls may include property use restrictions, building restrictions, and groundwater use restrictions.

State law requires that DEQ consider seven specific criteria when proposing or selecting a cleanup option. The selected cleanup options must:

- 1. Protect public health, safety, and welfare and the environment;
- 2. Meet applicable or relevant state and federal environmental requirements, criteria, or limitations (ERCLs);
- 3. Mitigate exposure to risks to public health, safety, and welfare and the environment;
- 4. Be effective and reliable in the short- and long-term;
- 5. Be technically practicable and implementable;
- 6. Use treatment technologies or resource recovery technologies if practicable, giving due consideration to engineering controls; and
- 7. Be cost effective.

Cleanup alternatives considered in the Feasibility Study and Proposed Plan are:

- 1. No further action
- 2. Stabilization/Solidification with Capping

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- 3. Asphalt Product Recovery, with options for the remaining asphalt residual:
 - A. Stabilization/Solidification with Capping
 - B. Excavation and Offsite Landfill Disposal
- 4. Excavation and Offsite Landfill Disposal
- 5. Excavation and Onsite Landfarming
- 6. Excavation and Offsite Landfarming
- 7. Monitored Natural Attenuation

The no action alternative is used as a baseline to compare the other options against. None of the options would meet each of the seven criteria on their own. However, a combination of cleanup options will meet the criteria.

The Preferred Remedy

DEQ's preferred remedy for the BWOR Facility is a combination of alternatives 3b, 4, and 7. The preferred remedy also includes institutional controls, long-term monitoring and maintenance, site preparation, and ground surface regrading and revegetation. Alternative 3b (asphalt product recovery with excavation and offsite landfill disposal) is the recovery of asphalt from earthen pits and aboveground tanks to produce an asphalt product with commercial economic value that will offset the overall cost of the remedy. An estimated 20% of the original volume will be a residue unsuitable for reuse and therefore has no economic value so will be disposed of offsite at a landfill. Alternative 4 (excavation and offsite landfill disposal) was selected for soil because, compared to the other alternatives, it is cost effective, has a predictable and controllable completion timeframe, and addresses all contaminants including metals. Alternative 7 (monitored natural attenuation) was selected for groundwater because it is cost effective, is already occurring, and, because the groundwater at the BWOR Facility is not used and is not a potential source of drinking water, presents limited exposure pathways. Institutional controls will provide additional protectiveness while contamination in the groundwater naturally degrades to below cleanup levels. The total estimated cost of the preferred remedy is \$1,307,619.

Public Involvement

The preferred cleanup option discussed in the Proposed Plan is based on the information in DEQ's files for the Big West Oil Refinery Facility. The complete files are available at DEQ's Helena office. The Proposed Plan can be viewed at the Kevin city government office, DEQ's office in Helena, and on DEQ's website at http://deq.mt.gov/pubcom.mcpx.

DEQ encourages public comment on the Proposed Plan. During the public comment period, which ends at 11:59 p.m. December 16, 2015, the public can send comments in writing to P.O. Box 200901, Helena, MT 59620.

A public meeting is scheduled on December 2, 2015, at 12:30 pm at the Kevin Center Depot (4 - 1st Street North in Kevin, Montana) to provide additional information and receive oral comments. Oral comments will not be accepted over the telephone, but you may call Travis Erny for additional information at 406-444-6802.